DOCUMENT RESUME

ED 373 461 EC 303 229

AUTHOR Kennedy, Clarice; And Others
TITLE Study Strategies: A Formula for Exceptional Outcomes in the Mainstream.
PUB DATE Apr 94
NOTE 7p.; Paper presented at the Annual Convention of the Council for Exceptional Children (72nd, Denver, CO, April 6-10, 1994).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Generalization; *Instructional Effectiveness; Intermediate Grades; Junior High Schools; Junior High School Students; *Learning Disabilities; *Learning Strategies; *Metacognition; *Spelling Instruction; *Study Skills; Teaching Methods
IDENTIFIERS *Neurolinguistic Programming

ABSTRACT

Ten students (ages 11 to 13) with learning disabilities were taught the Neuro Linguistic Programming (NLP) study approach to learning spelling words. This study strategy was extracted from students who had won spelling bees and comprises five basic components: (1) physiology (students visually picture the word to be learned); (2) strategy (students picture the word on an object which gives them pleasant feelings, "chunk" the word into parts, and try to spell the word backward); (3) belief (students are encouraged to believe the system always works and the more they use it the more proficient they become); (4) feelings (self-confidence and good feelings are systematically fostered); and (5) extraction and duplication (students are encouraged to combine components individualistically and to observe high performers of other skills and extract their strategies). When compared to a control group, the experimental group achieved significantly higher spelling scores. These students were also able to generalize the NLP study method to other content areas, specifically mathematics. (Contains 13 references.) (DB)

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ED 373 461

Study Strategies: A Formula for Exceptional Outcomes in the Mainstream

Clarice Kennedy
Putnam County Schools
Palatka, Florida

C. Van Nagel
Department of Special Education
University of North Florida

Marcelle Lovett
Division of Continuing Education
University of North Florida

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Ten students were taught the Neuro Linguistic Programming study approach to learning spelling words. When compared to a control group, the experimental group achieved significantly higher scores. The students were also able to generalize the NLP study method to other content areas.

It has been known for some time that teaching learning strategies to students with learning problems is effective in enhancing student achievement (Alley & Deshler, 1979; Hallahan & Sapona, 1983; Deshler, Schumaker, Lenz, & Ellis, 1984). Evidence suggests that students can be taught strategies but they have difficulty knowing when to apply these strategies to new learnings. Furthermore, learning strategies that have been created to assist students do not always work for all students because of individual student's learning styles. Armbruster, Anderson, Bruning, and Meyer (1984) pointed out that most study strategies are effective, but no one study strategy is appropriate for all in all study situations. The assumption that one study strategy will work for all learners overlooks learner differences (Reynolds & Werner, 1993/1994). To mitigate this problem, the authors decided to investigate the efficiency of teaching students how to

(1) create their own strategies by generalizing factors that make up learning strategies, and

(2) extract, duplicate, or adapt strategies from high performers whether they be in education or in some occupation or sport.

If students could do the above, it would enhance their achievement and self-esteem. They would no longer be dependent on others to create learning strategies for them. Furthermore, they could generalize and adapt from one situation to new and novel situations.

Perkins and Blythe (1994) pointed out that learners must spend the larger part of their time with activities that ask them to generalize, find new examples, carry out applications, and work through understanding performances. They must do this in a thoughtful way with appropriate feedback to help them perform better.

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Hypotheses

As a result of the aforementioned, the following research hypotheses were created:

(1) Students can be taught the components of the Neuro Linguistic Programming (NLP) Learning Strategy approach and will be able to apply it to a content area.

(2) Students will be able to generalize the NLP Learning Strategy components to a new content area.

(3) Students will be able to successfully extract learning strategies from competent learners or high performers in a specific skill area.

The following null hypothesis was created to test the significance of the study:

There will be no significant difference between those students receiving the strategy generalization and extraction methods and those who are taught traditionally.

Methods

Population. From a population of learning disabled students ages 11 to 13, ten students were randomly selected to be the experimental group. Each student was tested by a psychologist and labeled by a staffing committee as being learning disabled and is currently in classes for learning disabled. Ten learning disabled students were randomly selected as a control group.

Procedure. The students in the experimental group were taught the Neuro Linguistic Programming Learning Strategies approach to learn to spell new words. This strategy was extracted from students who had won spelling bees and is comprised of four basic components.

Component One: Physiology. Competent spellers do not rely on a phonic approach to learning words because approximately 38% of English words cannot be spelled phonetically (Hanna, Hodges, & Hanna, 1971). Competent spellers primarily rely on their visual memory and use phonics as a back-up approach.

To engage the mind in the visual process, NLP practitioners observed the physiology of people who spelled visually and noticed that these individuals would sit up straight and their eyes would go to the left as they pictured words they had studied. It was observed that learning disabled students rarely looked to the left to remember words, and that their eyes moved randomly back and forth which implied that they did not have a visual representation of the word.

The learning disabled students in the experimental group were taught to look to the left and to picture the word to be learned on their favorite object or

hero. This served two purposes. It gave the student a good background on which to imprint the word thus enhancing the initial imprint of the word on the brain. Secondly, it gave the student good feelings about learning the word.

Component Two: Strategy. The students in the experimental group were taught the strategy of looking up to the left and picturing the word they wanted to remember on some object that gave them pleasant feelings. They were also told to make the picture big, bright, clear, and colorful. This would enhance the visual imprint in their brain. Additionally, they were told to spell the word backward and to break it into manageable chunks of two or three chunks. For example, "tomato" might be broken "to-ma-to." This chunking organized the information in the brain and reduced it into smaller visual units to be remembered thus facilitating the learning process. Spelling the word backward forced the student to use his/her visual memory and thus eliminated the phonetic spelling of the word. This perceptual shift would enhance visual perception and thus facilitate memorization of the word.

As the students studied the words, they were encouraged to add color and to change the size and shape of the letters that gave them trouble. This would make the letters stand out in their mind and facilitate the memorization process. After they could spell the word backward, they found that they could easily spell the word forward and that it was locked in memory. The more they used the physiology and strategies of the system, the easier it became for them to learn to spell new words.

Component Three: Belief. According to the Bible, "As a man believeth in his heart so shall he be." It is well known that a person's belief system greatly influences his/her performance. Furthermore, it is well known that exceptional children have negative belief systems about themselves (poor self-concept) and their performance (Bender, 1987a, 1987b; Black, 1974; Bryant & Pearl, 1979; Silverman & Zigmond, 1983). To modify this belief system, the students were told that this was a system that always worked, and that the more they used it, the more proficient they would become in spelling words. They were also encouraged by positive comments whenever their performance improved slightly. Students' negative statements were negated by statements such as "Erase that," or "Cancel that thought," and replaced with injunctions and attributions such as, "I used to have trouble, but now I have a strategy."

The ultimate goal of this component was to get each student to believe in his/her abilities.

Component Four: Feelings. The literature is replete with information on how positive feelings and a positive self-concept facilitate the learning process. To facilitate the goal of positive feelings and, therefore, a positive self-concept, the teacher was instructed to be positive and the students were instructed to select visual images that were positive in nature. They were also instructed to think of times when they learned things that gave them good feelings. Students' behavior was recognized and complimented to further facilitate good feelings. The students worked in pairs to practice and acknowledged each other's gains.

The students were constantly told to picture and recapture the feelings they had when they had positive learning experiences and to bring these feelings to the present learning experience.

Component Five: Extraction and Duplication. The students were reminded each time to combine these components into a meaningful whole that would work for them. The teacher was given a highly structured format as to what she was to do each day. This format was taken from *Megateaching and Learning: Neuro Linguistic Programming Applied to Education* (Van Nagel, Siudzinski, Reese, & Reese, 1985). Once the students evidenced gains in spelling scores, they were then instructed to learn math facts and algorithms. The students then generalized the components from the spelling strategy and practiced them until gains were evidenced in math.

The final stage of the experiment was to ask the students to extract strategies or skills from persons who did something extremely well. First, they were to observe the physiology and make notes as to what they did with their bodies. Next, they were then to extract the strategies by asking, "What did you do first? What did you do next?" and so on. This was repeated until they could form a sequence of the strategies used by successful people. Thirdly, they were to ask what they said to themselves while doing the skill or what others said to them that increased the belief that they could do the skill or task. Lastly, they were to ask what kind of feelings they had until they could extract the kind of internal feeling state the people were in when they were successful. Examples: Running a race requires adrenaline; spelling requires a calm, focused state; etc.

Control Group. The control group received traditional spelling instruction as described in the teacher's manual.

Analysis of Data

To find out if there was a significant difference (.05), post test scores were compared between the experimental group and the control group. These data were subjected to statistical analysis.

To answer research hypothesis one, *students can be taught the components of the NLP Programming Learning Strategy approach and will be able to apply it to a content area*, it was quite evident by the increased achievement scores of students and the fact that they used the NLP Strategies that students could learn to employ the NLP Learning Strategies Components.

To answer research hypothesis two, *students will be able to generalize the NLP Learning Strategy components to a new content area*, students did generalize the NLP Learning Strategies Components from spelling to math. This was observed and documented on a daily basis during math lessons by the teacher and experimenters.

To answer research hypothesis three, *students will be able to successfully extract learning strategies from competent learners or high performers in a specific skill area*, one of the experimenters let the students observe her while she was drawing and had

them extract her strategies. They also interviewed some of their peers who had won contests such as a spelling bee and a race. In each case, students used the components of the NLP Strategy Extraction method.

Results

Research hypothesis one, *students can be taught the components of the NLP Learning Strategy and will be able to apply it to a content area*, was substantiated in that all ten students could verbalize and utilize all components of the NLP Learning Strategies Model.

Research hypothesis two, *students will be able to generalize the NLP Learning Strategy Components to a new content area*, was confirmed in that all ten of the students generalized the components from spelling to math. This was achieved by the second week of the study.

Research hypothesis three, *students will be able to successfully extract learning strategies from competent learners or high performers in a specific skill area*, was confirmed in that nine of the ten students were able to extract the strategies from successful performers in art, spelling, etc. as demonstrated.

The null hypothesis was rejected because the students in the experimental group scored significantly higher than the control group as evidenced by the results of the Mann-Whitney U-test > .05.

Discussion

The old adage, "Feed a man a fish and you feed him for a day. Teach a person how to fish and you feed him for life," is applicable to the philosophy of this research. We are now embarking upon a new era where knowledge triples every seven years. Knowledge and skills that were useful seven years ago are already out of date. It is estimated that students in our schools today will have to change their job skills at least five to seven times during their lifetime.

Therefore, it behooves us to redirect our focus on not just what to learn but how to learn and how to learn efficiently. NLP strategy extraction, duplication, and enhancement are some of the tools that can meet this need. We need to teach all students early in life to be flexible and adaptable and to give them the tools to enable them to acquire new skills and jobs. It is hoped that this project will be the impetus for future research. We invite your participation in this movement.

*We wish to thank Angie Holland, a teacher at Jenkins Middle School in Palatka, Florida, for her invaluabe assistance in conducting the research for this study. This project would not have reached fruition without her assistance.

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